

I claim:

1. Means to control the switching of a plurality of electrical loads from a primary power source to a secondary power source upon corruption of said primary source, comprising:

5 a first logic means that is arranged to accept power from said primary source and to monitor selected parameters of said power source;

first circuit breaker means communicating with said first logic means and arranged to interrupt power flow from said primary source upon the detection by the logic means of an out of tolerance current parameter;

10 a second logic means that is arranged to accept power from said secondary source and to monitor selected parameters of said power source;

second circuit breaker means communicating with said second logic means and arranged to interrupt power flow from said secondary source upon the detection by the logic means of an out of tolerance current parameter;

15 a plurality of electrical loads, each of said loads arranged to accept power either from said primary power source or from said secondary power source;

a plurality of switches, one switch for each said power means, each of said switches comprising a coil-activated, double throw electro-mechanical relay that will drop out of a first throw position to a second throw position upon a
20 reduction of voltage across said coil, each said relay in its first throw position allowing current to flow from said primary source through said relay coils and to said load, each said relay in its second throw position allowing current to flow from said secondary source through said relay coils and to said load.

2. The means of claim 1 wherein a parameter monitored by said first logic means is the voltage of the primary power source.

3. The means of claim 1 wherein said primary power source is three
5 phase, and a parameter monitored by said first logic means is the failure of one phase of said three phase source.

4. The means of claim 1 wherein a parameter measured by said second is the voltage of the secondary power source.

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5. The means of claim 1 wherein said secondary power source is three phase, and a parameter monitored by said second logic means is the failure of one phase of said three phase source.

15 6. The means of claim 1 wherein the parameters monitored by the first logic means are the same as the parameters monitored by the second logic means.

20 7. The means of claim 1 wherein the parameters monitored by the first logic means are different from those parameters monitored by the second logic means.

8. The means of claim 1 wherein said relay drops out of a throw position upon a reduction of voltage across said relay coil to a level less than 10% of nominal voltage.

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